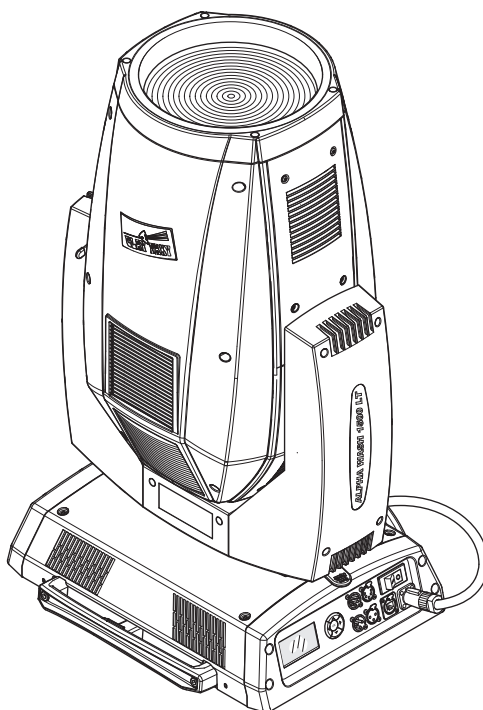




INSTRUCTION MANUAL

PRELIMINARY



INDEX

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2	Safety information
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Congratulations on choosing a Clay Paky product!

We thank you for your custom.

Please note that this product, as all the others in the rich Clay Paky range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.

Carefully read this instruction manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.

CLAY PAKY S.p.A. disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this instruction manual, which must always accompany the fitting.

CLAY PAKY S.p.A. reserves the right to modify the characteristics stated in this instruction manual at any time and without prior notice.

SAFETY INFORMATION

• Installation

Make sure all parts for fixing the projector are in a good state of repair.

Make sure the point of anchorage is stable before positioning the projector.

The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible.

If the safety chain gets used, it needs to be replaced with a genuine spare.

• Minimum distance of illuminated objects

The projector needs to be positioned so that the objects hit by the beam of light are at least 5 metres (16' 5") from the lens of the projector.

• Minimum distance from flammable materials

The projector must be positioned so that any flammable materials are at least 0.20 metres (8") from every point on the surface of the fitting.

• Mounting surfaces

It is permissible to mount the fitting on normally flammable surfaces.

• Maximum ambient temperature

Do not operate the fixture if the ambient temperature (T_a) exceed 40° C (104° F).

• IP20 protection rating

The fitting is protected against penetration by solid bodies of over 12mm (0.47") in diameter (first digit 2), but not against dripping water, rain, splashes or jets of water (second digit 0).

• Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing (**Class I** appliance according to standard EN 60598-1).

It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

• Hooking up to the supply mains

Connection to the electricity mains must be carried out by a qualified electrical installer.

Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.

• Temperature of the external surface

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 150°C (302°F).

• Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply.

After switching off, do not remove any parts of the fitting for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually nill. If it is necessary to replace the lamp, wait for another 20 minutes to avoid getting burnt.

The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly damaged, they have to be replaced with genuine spares.

• Lamp

The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus.

- Carefully read the "operating instructions" provided by the lamp manufacturer.

- Immediately replace the lamp if damaged or deformed by heat.

The products referred to in this manual conform to the European Community Directives to which they are subject:

- Low Voltage 2006/95/CE
- Electromagnetic Compatibility 2004/108/CE

1500W 



t_a 40°C

IP20

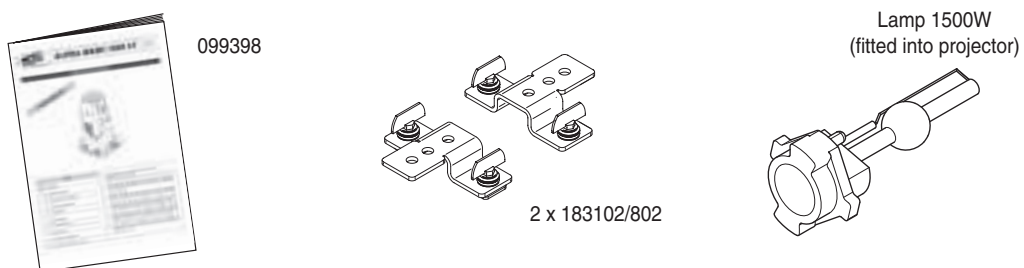


t_c 150°C



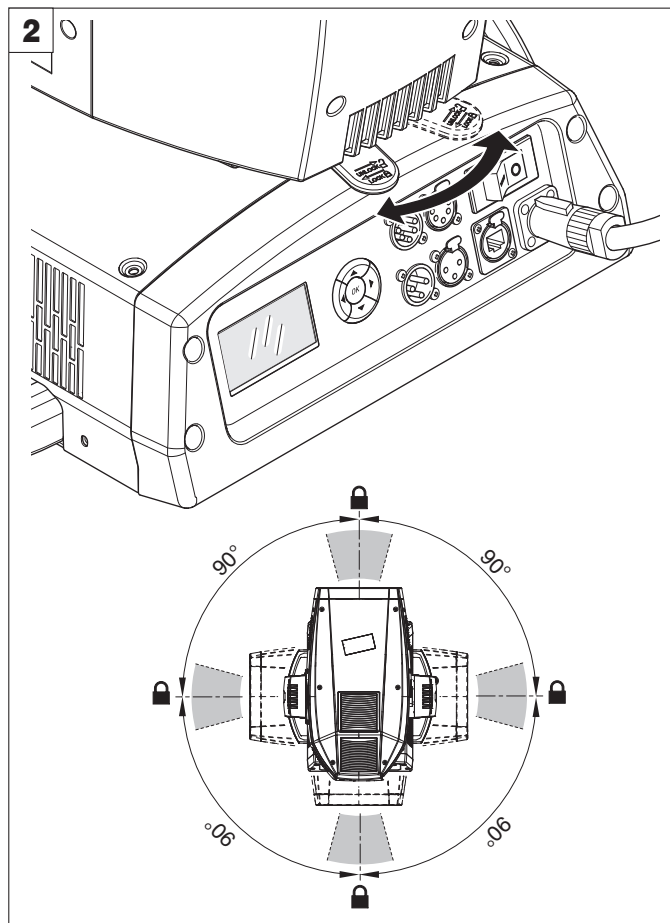
UNPACKING AND PREPARATION

1



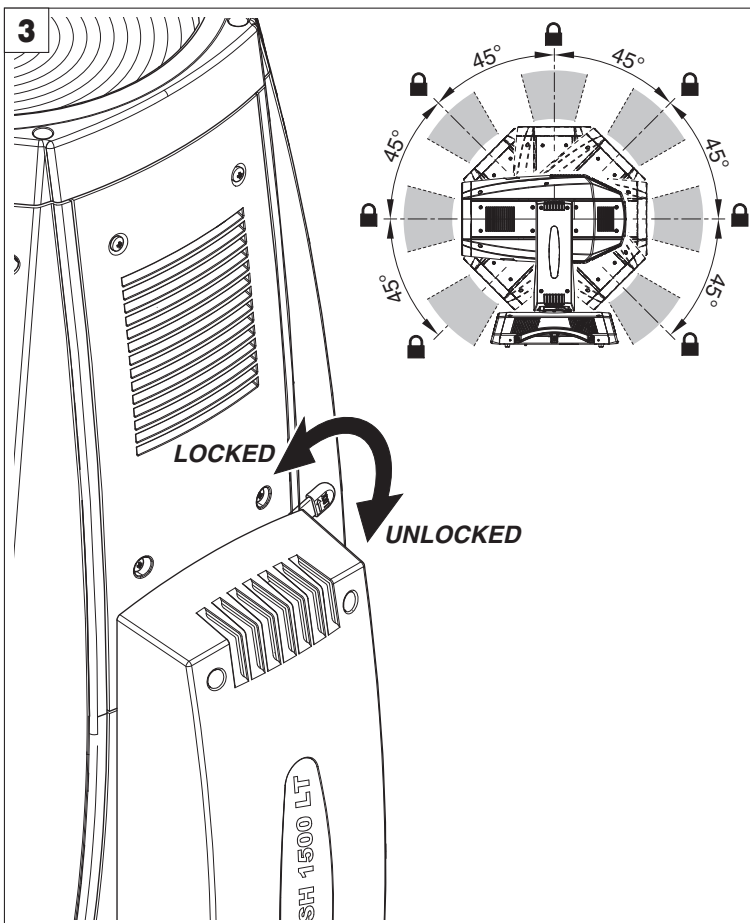
Packing contents - Fig. 1

2



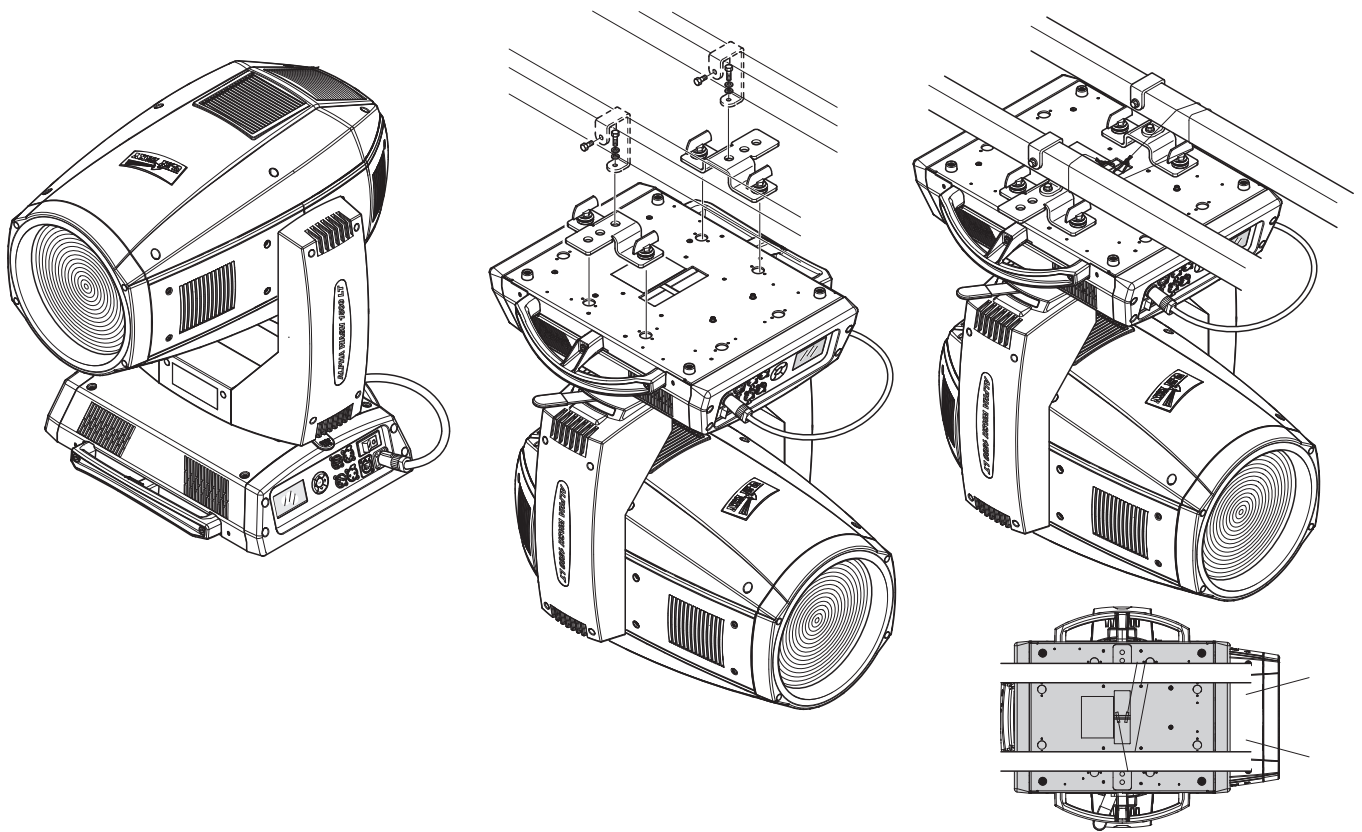
PAN Mechanism Lock and Release (every 90°) - Fig. 2

3



TILT Mechanism Lock and Release (every 45°) - Fig. 3

4

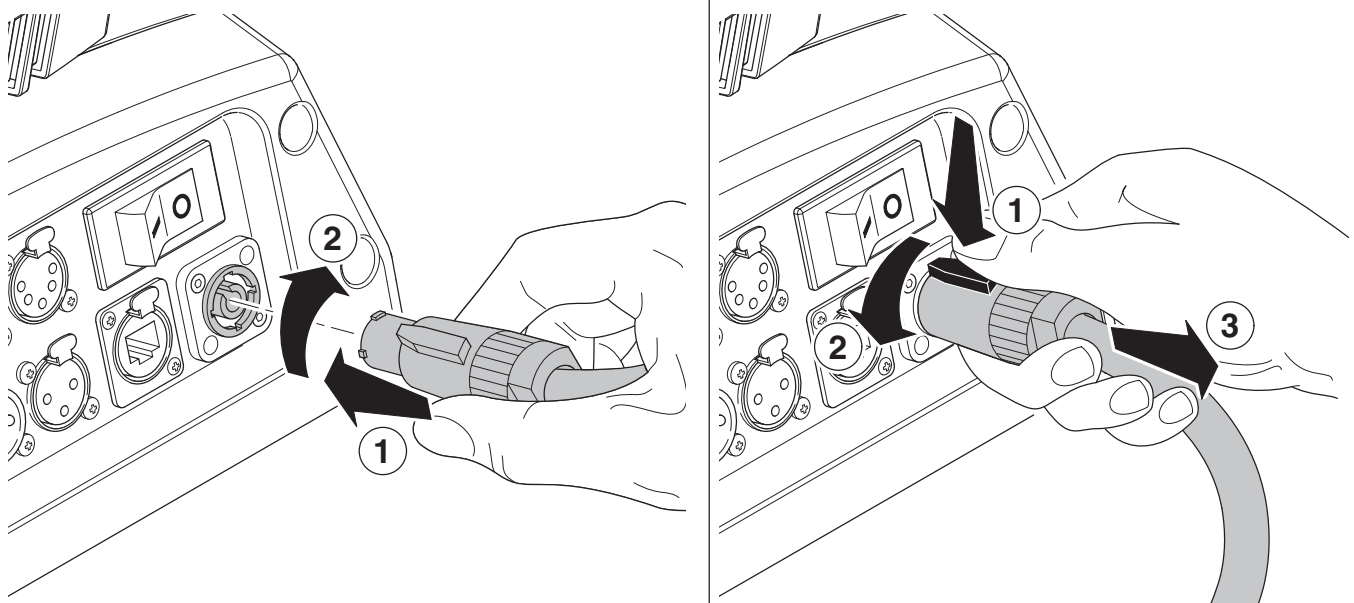


Installing the projector - Fig. 4

The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.

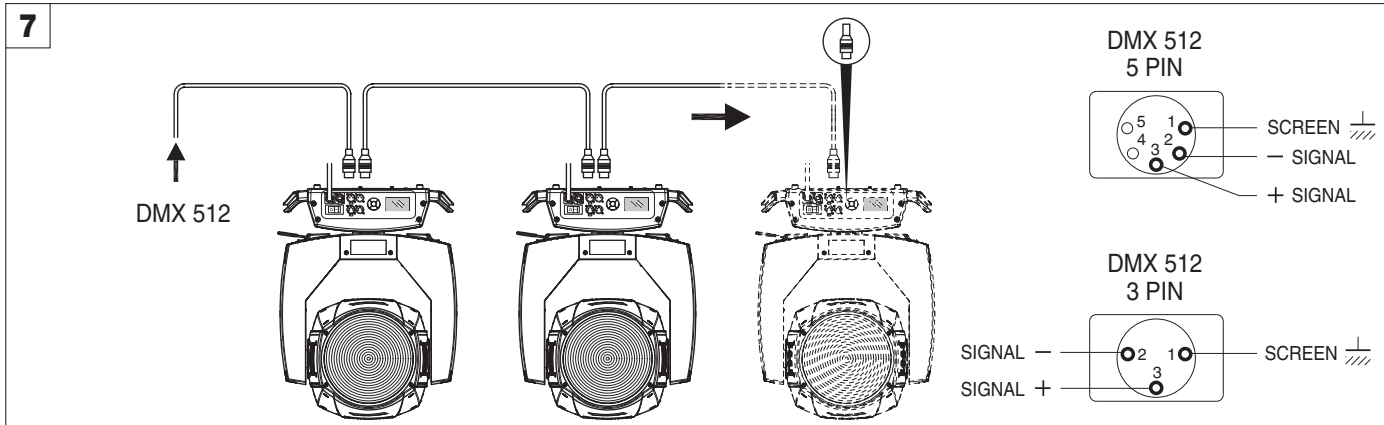
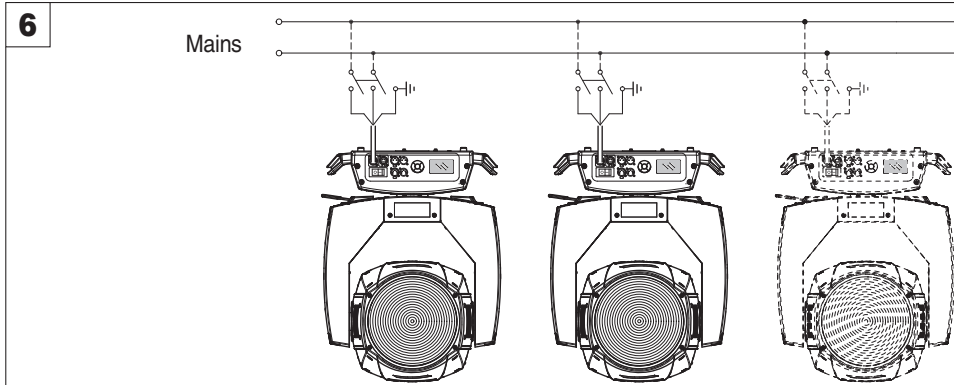
WARNING: with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

5



Connecting and disconnecting power cable - Fig. 5

CONTROL PANEL

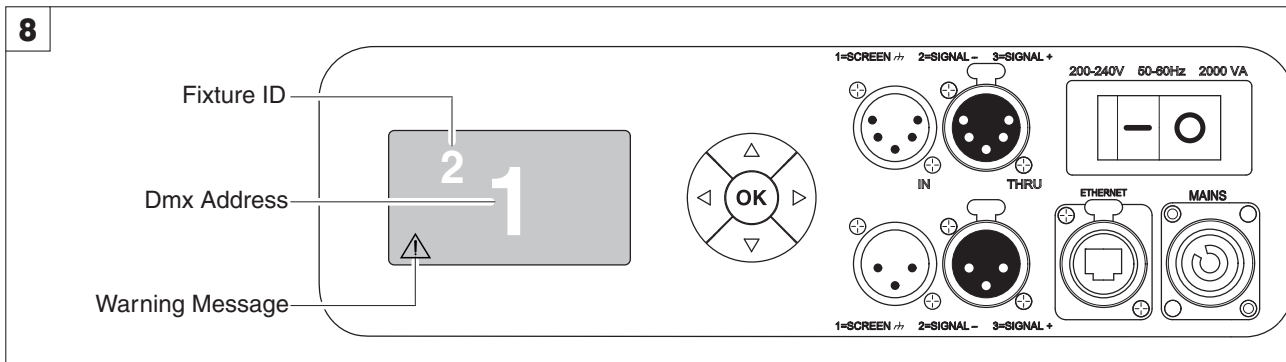


Connecting to the mains supply - Fig. 6

Connecting to the control signal line (DMX) - Fig. 7

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120 characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female connectors. A terminating plug must be inserted into the last projector with a resistance of 120Ohm (minimum 1/4 W) between terminals 2 and 3.

IMPORTANT: The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.



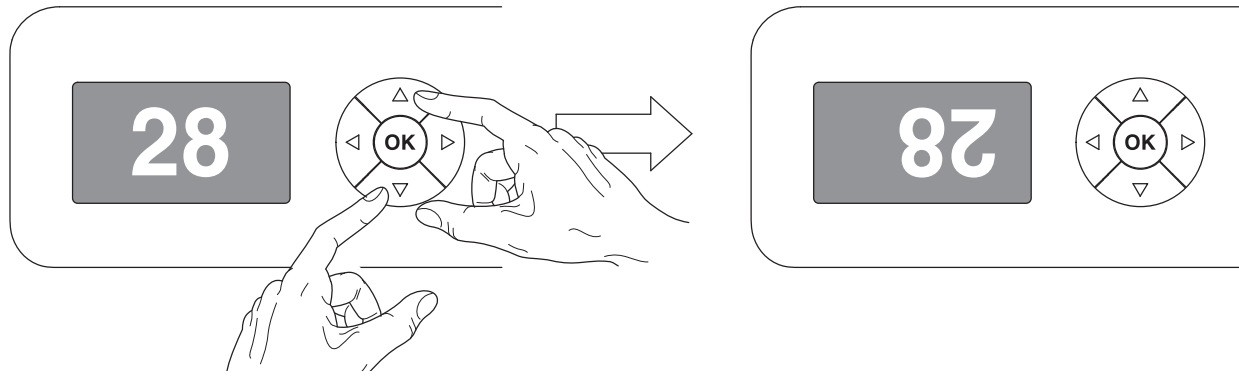
Switching on the projector - Fig. 8

Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:

	Model Alpha WASH 1500 LT	Firmware Version X.X.X Date - Hour	xxx (Fixture ID) Dmx Address xxx	System errors E: W:
--	--------------------------------	--	-------------------------------------	---------------------------------------

On conclusion of resetting in the case of the absence of the dmx signal, Pan and Tilt move to the "Home" position (Pan 50% - Tilt 50%). The control panel (Fig. 8) has a display and buttons for the complete programming and management of the projector menu. The display can be in one of two conditions: rest status and setting status. When it is in the rest status, the display shows the projector's DMX address and the Fixture ID address (if setted).

During menu setting status, after a wait time (about 1 minute) without any key having been pressed, the display automatically returns to rest status. It should be noted than when this condition occurs, any possible value that has been modified but not yet confirmed with the **OK** key will be cancelled.



Reversal of the display - Fig. 9

To activate this function, press UP ▲ and DOWN ▼ buttons simultaneously while the display is in the rest mode. This status will be memorised and maintained even for the next time it will be switched on. To return to the initial state, repeat the operation all over again.

Setting the projector starting address

On each projector, the starting address must be set for the control signal (addresses from 1 to 512).

The address can also be set with the projector switched off.

Setting the address: see pag. 10.

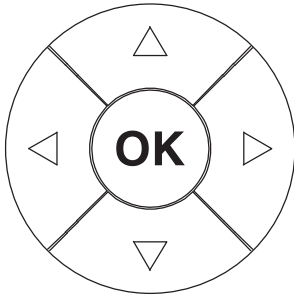
Setting the projector Fixture ID

On each projector, the Fixture ID address must be set for an easy identification of the fixtures in an installation (ID from 1 to 255).

The Fixture ID address can be set with the projector switched off.

Setting the Fixture ID: see pag. 10

Functions of the buttons - Using the menu



Confirms the displayed value, or activates the displayed function, or enters the successive menu.



Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.



Increases the value displayed (with auto-repetitions) or passes to the next item in a menu.







Return to the top level



Commute from units, tens, hundreds, in the "Address", "Fixture ID" and "Calibration" menu.

USING THE MENU:

- 1) Press **OK** once – “Main Menu” appears on the display.
- 2) Use the UP  and DOWN  keys to select the menu to be used:
 - Setup (Setup Menu): To set the setting options.
 - Option (Option Menu): To set the operating options
 - Informations (Informations Menu): To read the counters, software version and other information.
 - Manual Control (Manual control Menu): To trigger the test and manual control functions.
 - Test (Test Menu): To check the proper functioning of effects
 - Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.To enable the "Advanced" see pag.15
- 3) Press **OK** to display the first item in the selected menu.
- 4) Use the UP  and DOWN  keys to select the MENU items.

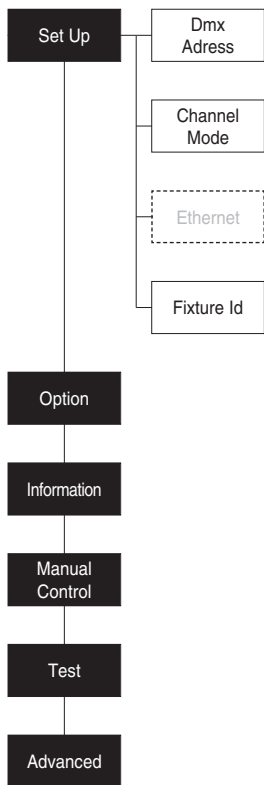
Setting addresses and options with the projector disconnected

The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply. All that is needed is to press **OK** to momentarily activate the display and thus access the settings. Once the required operations have been carried out, the display will switch off again after a wait time of 15 seconds.

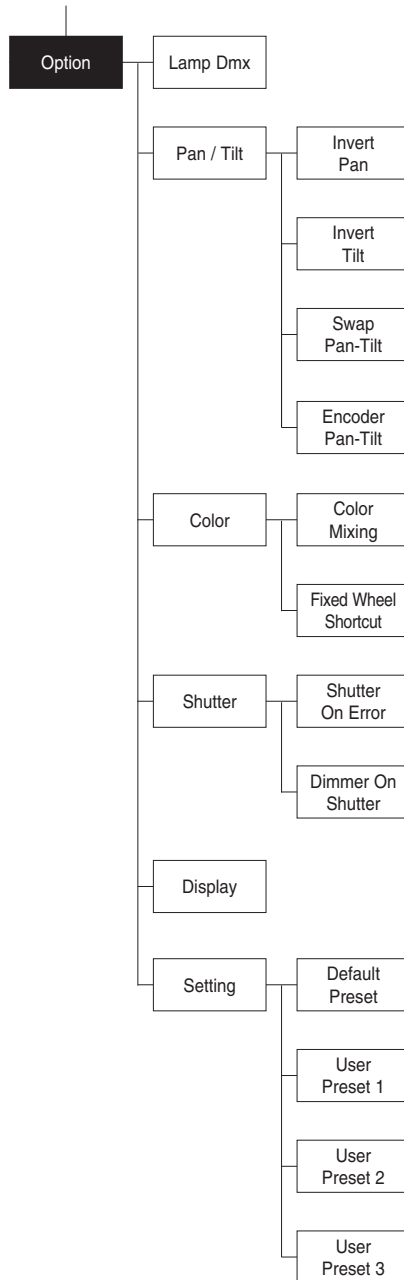
MENU SETTING

MAIN MENU

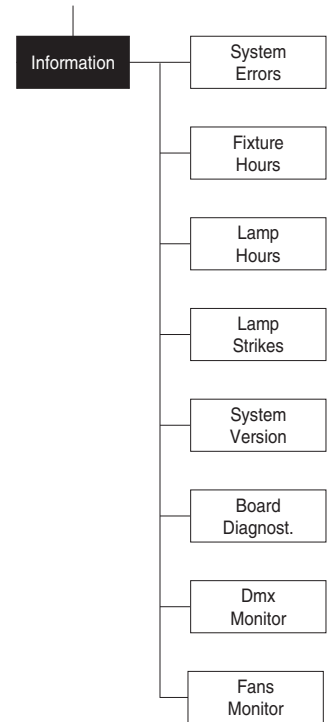
1



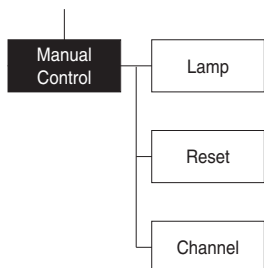
2



3



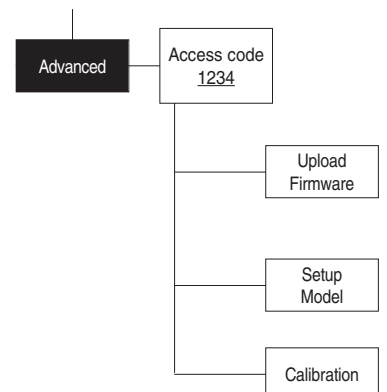
4

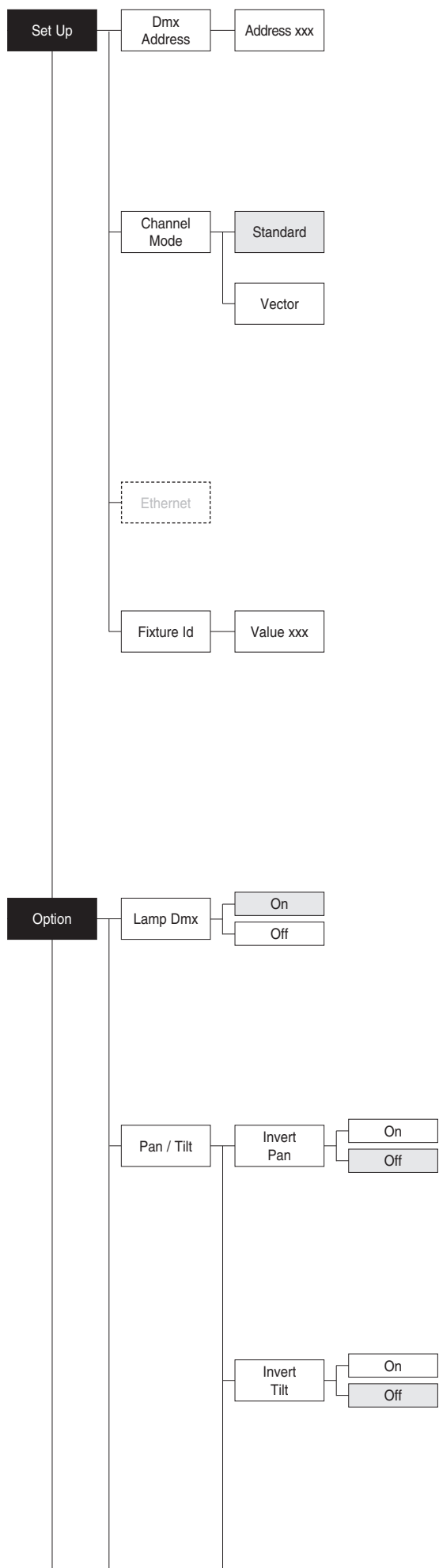


5



6





SET UP MENU

DMX ADDRESS

NOTE: Without the DMX signal the Address (XXX) flashing
Allows you to select the DMX ADDRESS

- 1) Press **OK** - the current DMX Address appear on the display.
- 2) Use the UP **▲** and DOWN **▼**, RIGHT **▶** keys to plan the DMX Address.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

CHANNEL MODE

Allows you to select a channel arrangement from the two available.

- 1) Press **OK** - the current settings appear on the display (Standard or Vector).
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following settings:
 - **Standard**
 - **Vector**
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

ETHERNET

Work in progress

FIXTURE ID

Allows you to select the FIXTURE ID

- 1) Press **OK** - the current Fixture ID appear on the display.
- 2) Use the UP **▲**, DOWN **▼**, RIGHT **▶** keys to plan the Fixture ID.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

OPTIONS MENU

NOTE: On grey the default options

LAMP DMX

Used for enabling lamp remote control channel.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) the lamp remote control channel.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

PAN / TILT

Invert pan

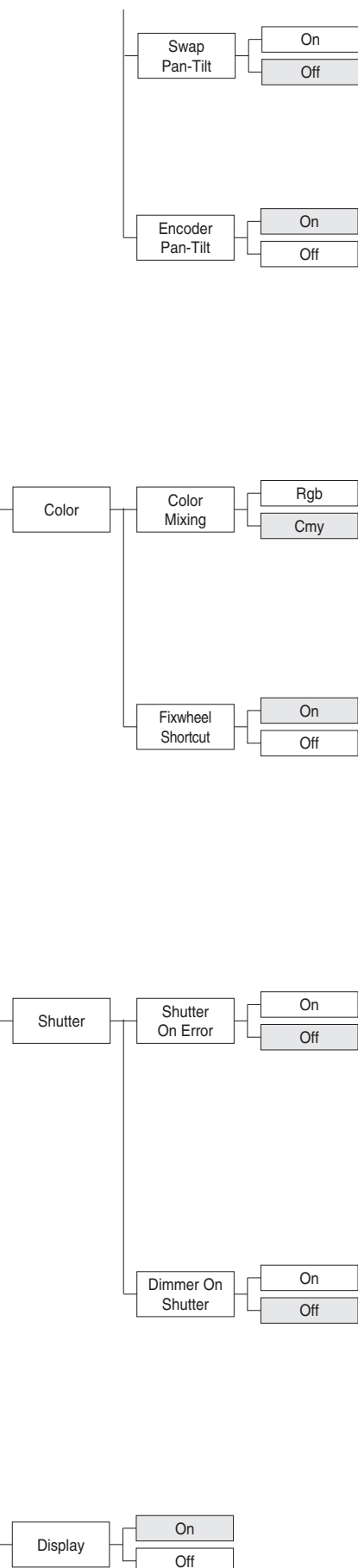
Used for reversing Pan movement.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) PAN inversion.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

Invert tilt

Used for reversing tilt movement.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) Tilt inversion.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.



Swap Pan-Tilt

Used for swapping Pan and Tilt channels (as well as Pan fine and Tilt fine).

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) Pan and Tilt channel swap.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

Encoder Pan-Tilt

Used for enabling the Pan / Tilt encoders.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) Pan / Tilt encoders (every time the projector is turned on this option is set to On).
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

COLOR

Color mixing

Used for reversing the CMY color mixing system.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys select one of the following settings:
RGB color mixing mode
CMY color mixing mode
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

Fixed wheel short-cut

Used for optimizing color change time so that the disc turns in the direction that requires shorter movement.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) color change optimization.
- 3) Press **OK** to confirm the selection, or LEFT **◀** to keep current settings.

SHUTTER

Shutter on error

Used for automatically closing the stop/strobe in the event of Pan/Tilt position error.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) automatic stop/strobe closing in the event of Pan/Tilt position error.
- 3) Press **OK** to confirm the selection, or LEFT **◀** to keep current settings.

Dimmer on Shutter

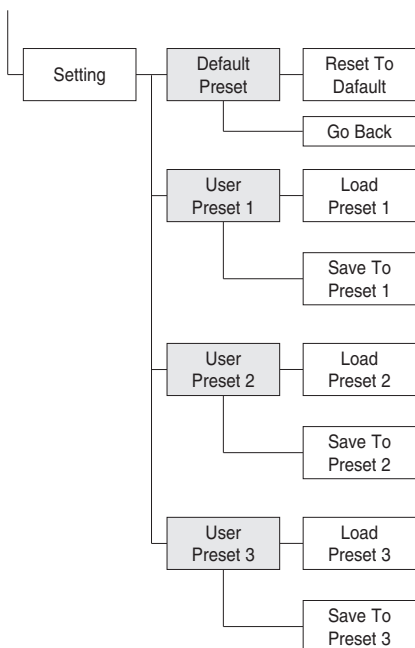
Enables automatic closing of the dimmer when the strobe is completely closed.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) the automatic closing of the dimmer.
- 3) Press **OK** to confirm the selection (the display blinks for some seconds), or LEFT **◀** to keep current settings.

DISPLAY

Used for automatically reduce brightness on the display after about 30 seconds in idle.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) the decreasing of display brightness.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.



SETTING

Used to save 3 different settings of the items in the options menu and relative submenus.

- 1) Press **OK** - "Default preset" appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following configurations:
 - Default preset (*)
 - User preset 1
 - User preset 2
 - User Preset 3
- 3) Press **OK** - "Load preset X" appears on the display.
- 4) Use the UP **▲** and DOWN **▼** keys to select:
 - Load preset X to recall a previously stored configuration.
 - Save to preset X to store the current configuration.
 a confirmation message (Are you sure?) appears on the display.
- 5) Select YES to confirm the selection or NO to keep the current setting and return to the next higher level.

(*) DEFAULT PRESET

Used for restoring default values on all options menu items and relevant submenus.

- 1) Press **OK** , a confirmation message (Are you sure?) appears on the display .
- 2) Select YES to confirm the selction or NO to keep current setting.

OPTION	DEFAULT
Lamp DMX	On
Invert Pan	Off
Invert Tilt	Off
Swap Pan-Tilt	Off
Encoder Pan-Tilt	On
Colour mixing	CMY
Fixed Wheel Shortcut	On
Shutter on error	Off
Dimmer on Shutter	Off
Display	On

INFORMATION MENU

SYSTEM ERRORS

FIXTURE HOURS

Used for displaying projector operating hours (total and partial).

Press **OK** - Hours total and partial appears on the display.

Total counter

Counts the number of projector working life hours (from manufacture to date).

Partial counter

Counts the number of partial projector working life hours since the last reset to date.

Press **OK** to reset partial projector working hours a confirmation message (Are you sure?) appears on the display.

Select YES to reset partial projectors counter or NO to keep the current setting and return to the top menu level.

LAMP HOURS

Used for displaying the lamp working hours (total and partial).

Press **OK** - Hours total and partial appears on the display.

Total counter

Counts the number of projector working hours with the lamp on (from manufacture to date).

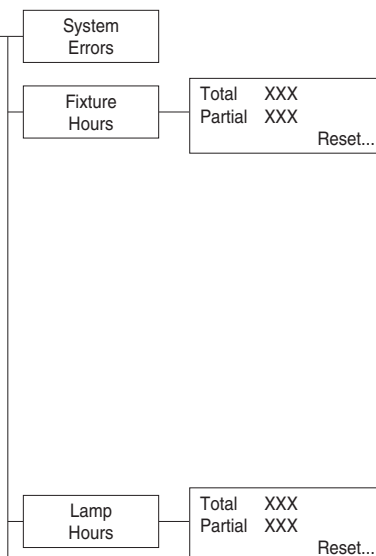
Partial counter

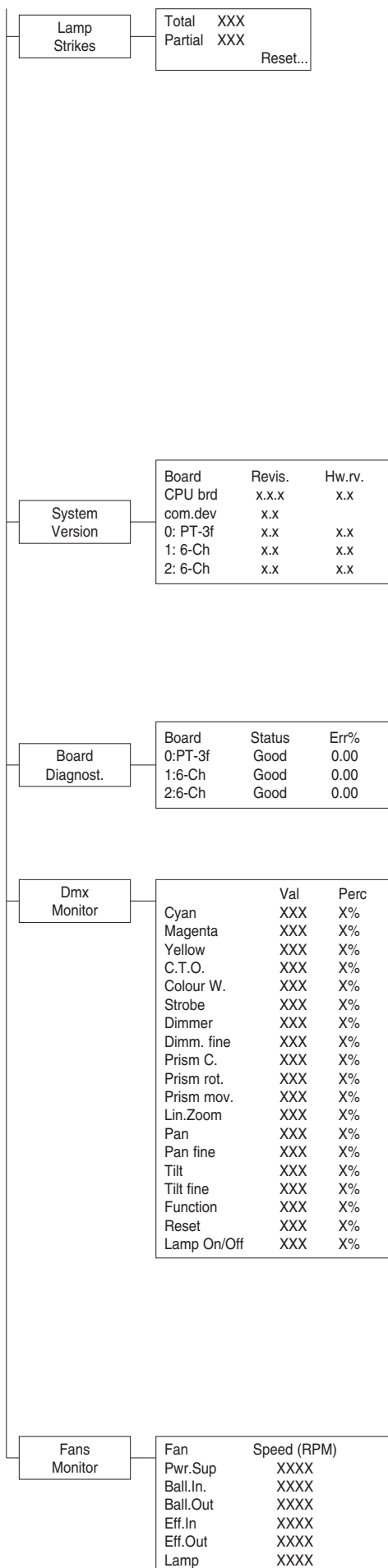
Counts the number of lamp working hours since the last reset to date.

Press **OK** to reset partial lamp working hours, a confirmation message (Are you sure ?) appears on the display.

Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

Information





LAMP STRIKES

Used for displaying the number of times the lamp was turned on (total and partial).

Press **OK** - the number of times the lamp was turned on (total and partial) appears on the display.

Total counter

Counts the number of times the lamp was turned on (from manufacture to date).

Partial counter

Counts the number of times the lamp was turned on since the last reset to date.

Press **OK** to reset partial lamp strikes hours, a confirmation message (Are you sure ?) appears on the display.

Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

SISTEM VERSION

Used for displaying the software and hardware version of each board installed in the projector.

1) Press **OK**

2) Use the UP **▲** and DOWN **▼** keys to select the board:

CPU brd (CPU board)

0: PT-3f (Pan / Tilt board)

1: 6-Ch (6 channel board)

2: 6-Ch (6 channel board)

BOARD DIAGNOSTIC

Used for displaying the status error of each board installed in the projector:

0: PT-3f (Pan / Tilt board)

1: 6-Ch (6 channel board)

2: 6-Ch (6 channel board)

DMX MONITOR

Used for displaying the projector DMX channel level in bit (Val) and in percentage (Perc)

Press **OK** and use the UP **▲** and DOWN **▼** keys to choose the channel you need.

FANS MONITOR

Used for displaying the speed of each fan installed in the projector:

Pwr.Sup (Power supply Fan)

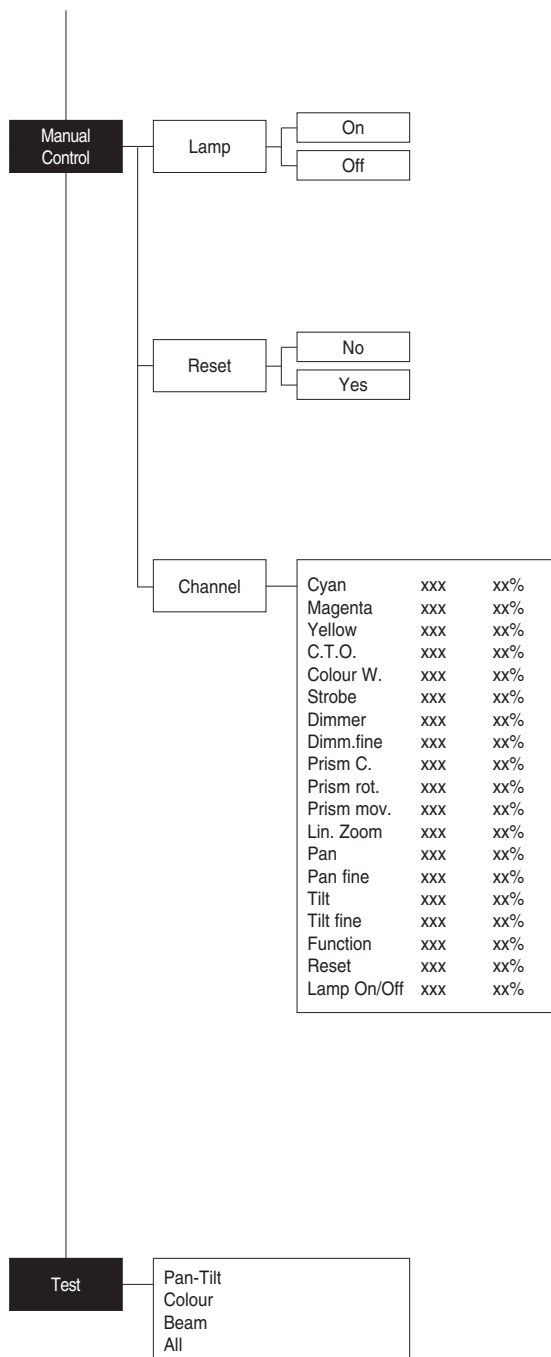
Ball. IN (Ballast IN Fan)

Ball. Out (Ballast OUT Fan)

Eff.IN (Effects IN Fan)

Eff.OUT (Effects OUT Fan)

Lamp (Lamp Fan)



MANUAL CONTROL

LAMP

Used for turning lamp on and off from the projector control panel.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** e DOWN **▼** keys to turn the lamp on (On) or off (Off)
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings and return to the top level.

RESET

Used for resetting the projector.

- 1) Press **OK** to reset the projectors, a confirmation message (Are you sure ?) appears on the display.
- 2) Select YES to starting reset the fixture or NO to keep the current setting and return to the top menu level.

CHANNEL

Used for setting channel levels from the projector control panel.

- 1) Press **OK** - the first channel appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select the required channel:
- 3) Press **OK** and use the UP **▲** and DOWN **▼** keys to select the required DMX level (value between 0 and 255).
- 4) Press LEFT **◀** to return to the top menu level.

TEST MENU

AUTOTEST

Allows you to check the proper functioning of effects.

- 1) Press **OK** the current setting appears on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to select the required test.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

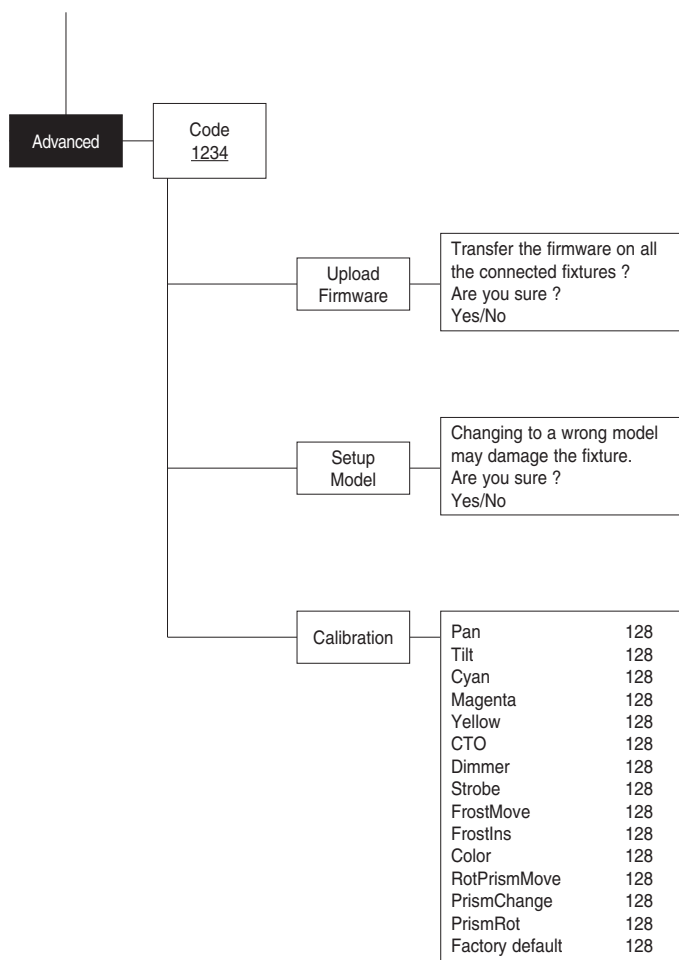
Test sequence:

Pan - Tilt effects (Pan & Tilt)

Colour effects (CMY, CTO, colour wheel)

Beam effects (Stopper-Strobe / Dimmer / Prism / Frost / Zoom)

All effects



ADVANCED MENU

To enable the "Advanced Menu" set up the "Access code" (1234) using the UP ▲, DOWN ▼, RIGHT ► keys.

Press **OK** - "Menu advanced" appears on the display

UP LOAD FIRMWARE

Allows you to transfer the firmware from 1 fixture to all the connected fixtures.

- 1) Press **OK**, a confirmation message appears on the display.
Select YES to start the firmware loading or no to keep the current setting and return to the top menu level

SETUP MODEL

Allows you to change the default model of projector.

- 1) Press **OK** a confirmation message appears on the display.
Select YES to define the model of projector or NO to keep the current setting and return to the top menu level.

CALIBRATION

Allows you to adjust effects from the control panel to obtain perfect uniformity between the projectors.

- 1) Press **OK** - "channels" appears on the display.
- 2) Using the UP ▲ and DOWN ▼ buttons, select the effect you wish to regulate.
- 3) Press **OK** and use the RIGHT ►, UP ▲ and DOWN ▼ buttons to make the adjustment by setting a value between 0 and 255.
- 4) Press **OK** to confirm the selection or LEFT ◀ to keep current settings and return to the top level.

FACTORY DEFAULT

Allows you to restore default values of all channels (128).

- 1) Press **OK** – a confirmation message appears on the display (Reset calibration to factory default?).
Select YES to reset calibration to factory default or NO to keep the current setting and return to the top menu level.

CHANNEL FUNCTION

ALPHA WASH 1500 LT

CHANNEL	Dmx MODALITY	
	STANDARD	VECTOR
1	CYAN	CYAN
2	MAGENTA	MAGENTA
3	YELLOW	YELLOW
4	C.T.O.	C.T.O.
5	COLOUR WHEEL	COLOUR WHEEL
6	STOP / STROBE	STOP / STROBE
7	DIMMER	DIMMER
8	DIMMER FINE	DIMMER FINE
9	ROTATING PRISM CHANGE	ROTATING PRISM CHANGE
10	PRISM ROTATION	PRISM ROTATION
11	EFFECTS MOVEMENT	EFFECTS MOVEMENT
12	ZOOM	ZOOM
13	PAN	PAN
14	PAN FINE	PAN FINE
15	TILT	TILT
16	TILT FINE	TILT FINE
17	FUNCTION	FUNCTION
18	RESET	RESET
19	LAMP ON / OFF	LAMP ON / OFF
20		PAN - TILT TIME
21		COLOUR TIME
22		BEAM TIME

• COLOUR MIXING - channel 1 - 2 - 3

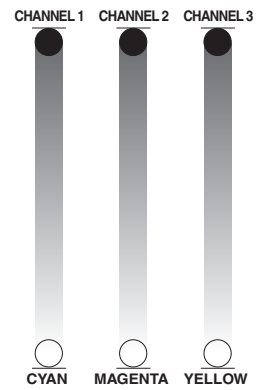
Operation with option color mixing: RGB



BIT	%	EFFECT
255	100	COLOUR EXCLUDED
0	0.0	COLOUR INSERTED

IMPORTANT: The lamp dim to half power 1 second after all the 3 channels stay at 0% level. The lamp goes back to full power when the channels level is put higher than 0%.

Operation with option color mixing: CMY



BIT	%	EFFECT
255	100	COLOUR INSERTED
0	0.0	COLOUR EXCLUDED

IMPORTANT: The lamp dim to half power 1 second after all the 3 channels stay at 0% level. The lamp goes back to full power when the channels level is put higher than 0%.

• C.T.O. - channel 4



BIT	%	EFFECT
255	100	FILTER INSERTED
0	0.0	FILTER EXCLUDED

• COLOUR WHEEL - channel 5



BIT	%	EFFECT
255	100	FAST ROTATION
128	50.0	SLOW ROTATION
0	0.0	WHITE

• STOP / STROBE - channel 6



BIT	%	EFFECT
252 - 255	98.7 - 100	OPEN
239 - 251	93.7 - 98.2	RANDOM FAST STROBE
226 - 238	88.7 - 93.2	RANDOM MEDIUM STROBE
213 - 225	83.7 - 88.2	RANDOM SLOW STROBE
208 - 212	81.7 - 83.2	OPEN
207	81.2	FAST PULSATION
108	42.5	SLOW PULSATION
104 - 107	41.0 - 42.0	OPEN
103	40.5	FAST STROBE (12 flash/sec)
4	1.7	SLOW STROBE (1 flash/sec)
0 - 3	0.0 - 1.2	CLOSED

IMPORTANT: The lamp dim to half power 1 seconds after the channel stay at 0% level. The lamp goes back to full power when the channel level is put higher than 0%.

• DIMMER - channel 7



BIT	%	EFFECT
255	100	
0	0.0	

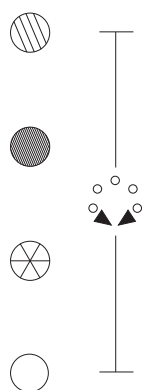
The lamp is linearly dimmed from full power to half power electronically and mechanically from half power to off.

• DIMMER FINE - channel 8



BIT	%	EFFECT
255	100	
0	0.0	

• ROTATING PRISM CHANGE - channel 9



BIT	%	EFFECT
192-255	75.0-100	OVALIZER
128-191	50.0-74.7	U.V. FILTER
64-127	25.0-49.7	PRISM
0-63	0.0-24.7	WHITE

• PRISM ROTATION - channel 10



BIT	%	EFFECT
255	100	FAST ROTATION (120 rpm)
193	75.5	SLOW ROTATION (3 rph)
191 - 192	74.7 - 75.0	STOP
190	74.2	SLOW ROTATION (3 rph)
128	50.0	FAST ROTATION (120 rpm)
127	49.7	POSITION 540°
105	41.7	POSITION 450°
84	33.0	POSITION 360°
63	24.7	POSITION 270°
42	16.2	POSITION 180°
21	8.2	POSITION 90°
0	0.0	POSITION 0°

• EFFECTS MOVEMENT - channel 11

(Frost, Prism, Colour wheel)

BIT	%	EFFECT
255	100	WIDE BEAM
0	0.0	NARROW BEAM

• ZOOM - channel 12

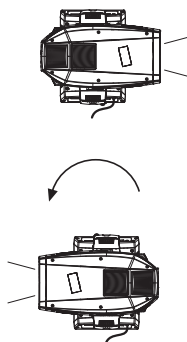


BIT	%	EFFECT
255	100	WIDE BEAM
0	0.0	NARROW BEAM

• PAN - channel 13

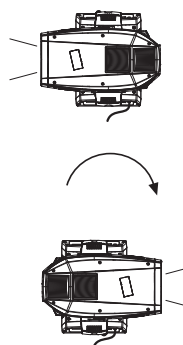
Operation with option InvertPan \diamond Off

(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)



BIT	%
255	100
0	0.0

Operation with option InvertPan \diamond On

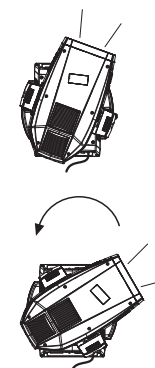


BIT	%
255	100
0	0.0

• PAN FINE - channel 14

Operation with option InvertPan \diamond Off

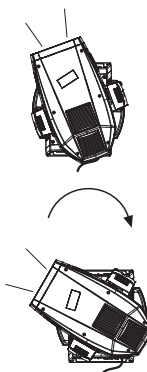
(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)



BIT	%
255	100
0	0.0

Operation with option InvertPan \diamond On

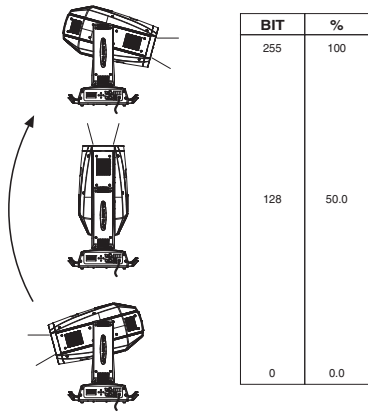
(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)



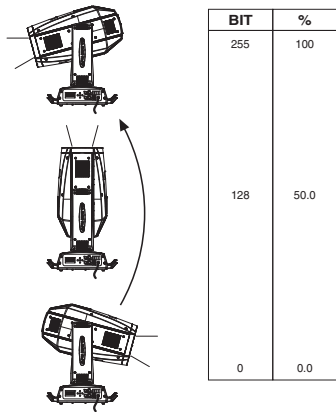
BIT	%
255	100
0	0.0

• TILT - channel 15

Operation with option Invert Tilt ◊ Off
(Pan conventionally represented at 0% and option Invert Pan ◊ Off)

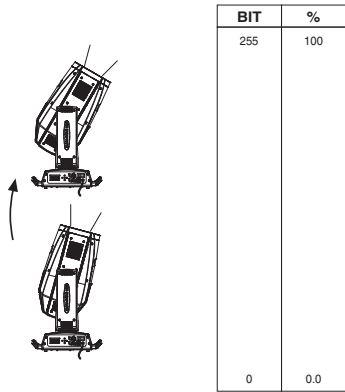


Operation with option Invert Tilt ◊ On
(Pan conventionally represented at 0% and option Invert Pan ◊ Off)

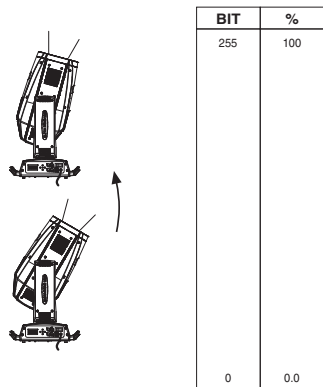


• TILT FINE - channel 16

Operation with option Invert Tilt ◊ Off
(Pan conventionally represented at 0% and option Invert Pan ◊ Off)



Operation with option Invert Tilt ◊ On
(Pan conventionally represented at 0% and option Invert Pan ◊ Off)



• FUNCTION - channel: 17

BIT	%	EFFECT
255	100	UNUSED RANGE
51	20.0	LINEAR (DEFAULT)
39	15.0	CONVENTIONAL
26	10.0	NORMAL SPEED
13	5.0	FAST SPEED (DEFAULT)
0	0.0	UNUSED RANGE

— DIMMER CURVE FUNCTION

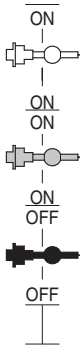
— PAN-TILT FUNCTION

The functions are activated staying 5 seconds in necessary level

• RESET - channel: 18

BIT	%	EFFECT
255	100	COMPLETE RESET
128	50.0	COMPLETE RESET
127	49.7	PAN / TILT RESET
77	30.0	PAN / TILT RESET
76	29.7	EFFECTS RESET
26	10.0	EFFECTS RESET
25	9.7	EFFECTS RESET
0	0.0	UNUSED RANGE

• LAMP CONTROL (only with option LAMP DMX On) - channel: 19



BIT	%	EFFECT
255	100	LAMP ON (FULL POWER)
180	70.5	Lamp ignition after 5 s in full power levels.
179	70.0	Immediate transition from half to full power.
101	39.5	LAMP ON (FULL POWER)
100	39.0	LAMP ON (HALF POWER)
26	10.0	Immediate transition from full to half power.
25	9.7	Lamp ignition not allowed in half power.
0	0.0	LAMP ON (HALF POWER)
		LAMP OFF
		Lamp switch off passing through the unused range and staying 5 s in Lamp OFF levels.
		LAMP OFF
		UNUSED RANGE

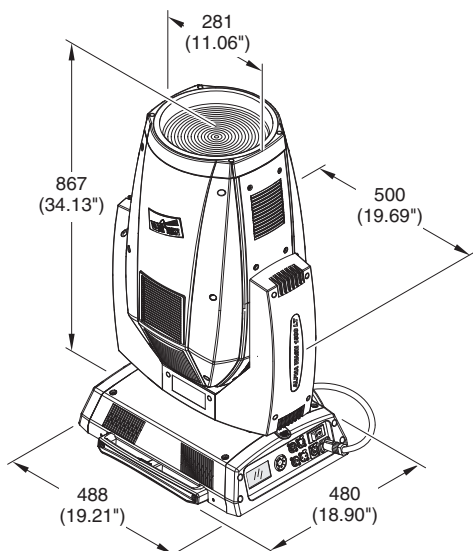
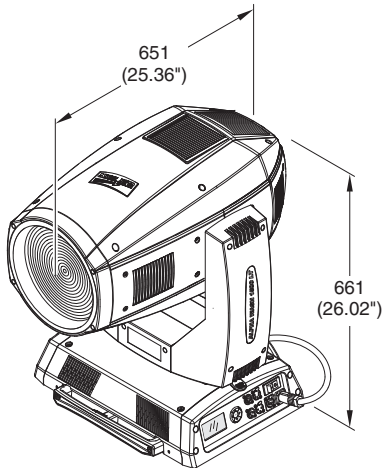
TIMING CHANNELS

	Timing Channel	Channel function
20	Pan - Tilt time	Pan - Tilt - (Pan fine - Tilt fine)
21	Colour time	CMY - C.T.O. - Colour Wheel
22	Beam time	Dimmer - Rotating Prism Change - Zoom

TIME TABLE

BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds
0	Full	43	8.6	86	24	129	41	172	58	216	170
1	0.2	44	8.8	87		130		173		217	
2	0.4	45	9	88	25	131		174		218	
3	0.6	46	9.2	89		132	42	175	59	219	180
4	0.8	47	9.4	90	26	133		176		220	
5	1	48	9.6	91		134	43	177	60	221	190
6	1.2	49	9.8	92	27	135		178		222	
7	1.4	50	10	93		136	44	179	65	223	200
8	1.6	51	10.2	94	28	137		180		224	
9	1.8	52	10.4	95		138	45	181	70	225	210
10	2	53	10.6	96	29	139		182		226	
11	2.2	54	11	97		140	46	183	75	227	220
12	2.4	55	12	98	30	141		184		228	
13	2.6	56		99		142	47	185	80	229	230
14	2.8	57	13	100	31	143		186		230	
15	3	58		101		144	48	187	85	231	240
16	3.2	59	14	102	32	145		188		232	
17	3.4	60		103		146	49	189	90	233	250
18	3.6	61	15	104	33	147		190		234	
19	3.8	62		105		148	50	191	95	235	260
20	4	63	16	106	34	149		192		236	
21	4.2	64		107	35	150	51	193	100	237	270
22	4.4	65	17	108		151		194		238	
23	4.6	66		109	36	152	52	195	110	239	280
24	4.8	67	18	110		153		196		240	
25	5	68		111	37	154	53	197	120	241	290
26	5.2	69	19	112		155		198		242	
27	5.4	70		113	38	156	54	199	130	243	300
28	5.6	71	20	114		157		200		244	
29	5.8	72		115	39	158	55	201	140	245	310
30	6	73	21	116		159		202		246	
31	6.2	74		117	40	160	56	203	150	247	Follow cue Data
32	6.4	75	22	118		161		204		248	
33	6.6	76		119	41	162	57	205	160	249	
34	6.8	77	23	120		163		206		250	
35	7	78		121	42	164	58	207	170	251	
36	7.2	79	24	122		165		208		252	
37	7.4	80		123	43	166	59	209	180	253	
38	7.6	81	25	124		167		210		254	
39	7.8	82		125	44	168	60	211	190	255	
40	8	83	26	126		169		212			
41	8.2	84		127	45	170	61	213	200		
42	8.4	85		128		171		214			
								215			

□ 200 - 240V



TECHNICAL INFORMATION

Power supplies available

- 200-240V 50/60Hz

Input power

- 2000VA a 230V 50Hz.

Lamp

Discharge lamp.

- Type HTI 1500W/60/P50 Lok-it
 - Cap PGJ50
 - Colour temperature 6000 K
 - Luminous flux 135000 lm
 - Average life 750 h
 - Any working position
- Type MSR Gold 1500 FastFit
 - Cap PGJ50
 - Colour temperature 6000 K
 - Luminous flux 120000lm
 - Average life 750h
 - Any working position

Motors

17 stepper motors, operating with microsteps, totally microprocessor controlled.

Optical unit

- Elliptic reflector with high luminous efficiency

Channels

Max 22 control channels.

Inputs

- DMX 512

Movable body

- Movement by means of two stepper motors, controlled by microprocessor.
- Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.
- Travel:
 - PAN = 540°
 - TILT = 252°
- Maximum speeds:
 - PAN = 4.0 sec (360°)
 - TILT = 3.2 sec (252°)
- Resolution:
 - PAN = 2.11°
 - PAN FINE = 0.008°
 - TILT = 0.98°
 - TILT FINE = 0.004°

IP20 protection rating

- Protected against the entry of solid bodies larger than 12mm (0.47").
- No protection against the entry of liquids.

CE Marking

In conformity with the European Union Low Voltage Directive 2006/95/CE and Electromagnetic compatibility Directive 2004/108/CE.

Safety Devices

- Bipolar circuit breaker with thermal protection.
- Automatic break in power supply in case of overheating or failed operation of cooling system.

Cooling

Forced ventilation with axial fans.

Body

- Aluminium structure with die-cast plastic cover.
- Two side handles for transportation.
- Device locking PAN and TILT mechanisms for transportation and maintenance.

Working position

Functioning in any position.

Weights and dimensions

- Weight: about 46.7 Kg (102lbs 12ozs).

CAUSE AND SOLUTION OF PROBLEMS

THE PROJECTOR WILL NOT SWITCH ON				PROBLEMS
ELECTRONICS NON-OPERATIONAL				
DEFECTIVE PROJECTION				
REDUCED LUMINOSITY				
POSSIBLE CAUSES				CHECKS AND REMEDIES
●			No mains supply.	Check the power supply voltage.
●		●	Lamp exhausted or defective.	Replace the lamp. (See instructions).
	●		Signal transmission cable faulty or disconnected.	Replace the cables.
	●		Incorrect addressing.	Check addresses (see instructions).
	●		Fault in the electronic circuits.	Call an authorised technician.
	●		Lenses or reflector broken	Call an authorised technician.
		● ●	Dust or grease deposited.	Clean (see instructions).

